

Notice of Allowability

Application No.

09/655,596

Applicant(s)

BEAUSOLEIL ET AL.

Examiner

Tuan A. Vu

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/16/2006.
2. ☒ The allowed claim(s) is/are 1-4.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 2/16/2006.

As indicated in Applicant's response, claim 1 has been amended. Claims 1-4 are pending in the office action.

EXAMINER'S AMENDMENT

2. The application has been amended as follows.

In the **Specifications**:

In the section entitled "Cross Reference to Related Applications:", amend as follows:

(Pg. 1, line 13-16)

"High speed software Driven Emulator Comprised of a Plurality of Emulation Processors with an Improved Maintenance Bus that Streams Data at High speed," " Serial No. #09/654,147, filed _____, (Attorney Docket No. POU9-2000-0046-US1), now issued as Patent No. 6,850,880.

(Pg. 1, line 18-21)

"High speed software Driven Emulator Comprised of a Plurality of Emulation Processors with a Method to Allow High Speed Bulk Read/write Operation Synchronous DRAM While Refreshing the Memory," Serial No. #09/656,541, filed _____, (Attorney Docket No. POU9-2000-0047-US1), now issued as Patent No. 6,901,359.

(Pg. 1, line 22-25)

"High Speed Software Driven Emulator Comprised of a Plurality of Emulation Processors with Improved Multiplexed Data Memory," Serial No. #09/522,354, filed _____, (Attorney Docket No. POU9-1999-0183-US1), now issued as Patent No. 6,832,185.

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

3. Claims 1-4 are allowed.

The following is an examiner's statement of reasons for allowance.

The prior art taken separately or jointly does not suggest or teach the following features.

A method in an emulation engine comprised of a plurality of modules, a work station to communicate data via a maintenance bus between the modules and the station, wherein each module includes a plurality of module processors having each a control store to store programmable sequence of emulation steps, and (i) a module main memory separate from the module processors' control stores and being accessible by each of said processors; the method to allow data transfer between said main memory and said work station without interrupting an in-progress emulation, comprising compiling said sequence of emulation steps to include one step to read from the control store and decoding a blocking code therein as a disable command, and in response to which (ii) blocking transfers between the plurality of module processors and said main memory and allowing data to be transfer between said work station and said module main memory during the in-progress emulation; as recited in claim 1.

Beausoliel, (USPN: 5,551,013), discloses an emulation environment with modules communicating with an work station for programmable code transfer, the modules having each a plurality of module processors, each of said module processors having a control store to have control code thereon being decoded during the emulation steps of the modules, the decoded code to enable a particular data access type for the emulation of a memory array; but Beausoliel does not teach or suggest a module main memory being separate from said processors as in (i) and during the steps of decoding the control code, decoding a blocking code as a command, as in (ii)

Art Unit: 2193

to block transfer between the plurality of module processors and said main memory and allowing data to be transfer between said work station and said main memory during and without interrupting the in-progress emulation.

The Office Action had attempted to analogize the MOP bit by Beausoliel to the blocking code of the invention, thus enabling blocking of data transfer between a memory and the module processors. But in view of the whole claim as amended, the cited parts of Beausoliel teaches a bit enabling or dictating a particular emulation data access type, thus do not disclose or suggest a blocking code disabling transfer between the module processors and the main memory of the module, such main memory being not same as the control store inside each module processors, as recited in (ii) to enable data transfer between the work station and said main memory, as recited in claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)272-3719.

Art Unit: 2193

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VAT
March 17, 2005

Kakali Ch.
KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100